Faculty of Engineering Management

| STUDY MODULE DESCRIPTION FORM | | | | | |
|--|---|--|--|--|--|
| | | Code 011105351011120185 | | | |
| Field of study Engineering Management - Part-time studies - | Profile of study (general academic, practical) (brak) | Year /Semester 3 / 5 | | | |
| Elective path/specialty | Subject offered in: Polish | Course (compulsory, elective) elective | | | |
| Cycle of study: | Form of study (full-time,part-time) | | | | |
| First-cycle studies | part-time | | | | |
| No. of hours Lecture: 14 Classes: - Laboratory: - | Project/seminars: | No. of credits | | | |
| Status of the course in the study program (Basic, major, other) (university-wide, from another field) | | | | | |
| (brak) | orak) | | | | |
| Education areas and fields of science and art | | ECTS distribution (number and %) | | | |
| Responsible for subject / lecturer: | | | | | |
| prof. dr hab. inż. Aleksandra Kawecka-Endler | | | | | |

prof. dr hab. inż. Aleksandra Kawecka-Endler email: aleksandra.kawecka-endler@put.poznan.pl tel. 61- 6653370

Wydział Inżynierii Zarządzania ul. Strzelecka 11 60-965 Poznań

Prerequisites in terms of knowledge, skills and social competencies:

| 1 | Knowledge | Student has knowledge of business processes, design, organization and implementation of the production processes, as well as in the area of design, evaluation, verification and implementation of production |
|---|---------------------|---|
| 2 | Skills | Student is able to use knowledge acquired during courses of other subjects |
| 3 | Social competencies | Student is responsible and can interact with others and work in a team Student understands the need for lifelong learning and acting in accordance with the rules |

Assumptions and objectives of the course:

Presenting knowledge of theoretical and practical problems connected with organization of production preparation and selected methods applied in this scope.

Study outcomes and reference to the educational results for a field of study

Knowledge:

- 1. Has the basic knowledge on the structure of the process of production, organizational units of production preparation [K01-InzA_W01, K02-InzA_W01, K04-InzA_W02]
- 2. Knows principal methods and instruments for amassing, processing and selecting data within range of processes occurring in the preparation of the production [K06-InzA_W04]
- 3. Knows principal methods and instruments for modeling processes and phenomena taking place in production [K05-InzA_W03, K1A_W09, K1A_W20]
- 4. Has the knowledge on legal standards and their sources and nature, of changes in the sphere of forming the product?s quality [K07-InzA_W5]

Skills:

- 1. Is able to forecast economic processes and phenomena by using standard methods and instruments from the sphere of economic science and management [K01-InzA_U5, K01-InzA_U6]
- 2. Applies the obtained knowledge for solving dilemmas occurring in his profession [K01-InzA_U7, K01-InzA_U8]
- 3. Analyzes suggested solutions for determined problems concerning organization of the preparation of the roduction and suggests suitable decisions [K01-InzA_U3]

Social competencies:

- 1. Is able to complete and improve own knowledge [K1A_K01]
- 2. Is able to notice causal dependencies in the realization of fundamental objectives and determine the importance of alternative or competitive tasks within the technical preparation of the production [K01-InzA_K2]
- 3. Is determined to think and act in an enterprising and effective way [K1A_K07]

Assessment methods of study outcomes

Forming assessment:

a) Classes: Current assessment of activity during classes

b) Lecture: basing on questions asked during the lecture, which refer to previous lectures on the subject

Final assessment:
a) Classes: colloquium
b) Lectures: final test

Course description

Production process components, range of tasks. Production process management, technical humanization and economical aspects. Product traits, quality and reliability. Objectives, tasks and functions of product production preparation in industrial company. Constructive, technological and organizational preparation of the production? planning and designing, far-reaching and current activity. Notion and significance of technology of products construction. Technological processes of assembly. Computer aid CAD and CAD/RAM. Curve of product life cycle. Costs of the production preparation. Documentation of production preparation and flow. Organization structure of product preparation units. Designing unit, serial and mass production; group technology, Flexible Manufacturing System. Starting new production. Innovative processes in activity of industrial company.

Basic bibliography:

- 1. Organizacja technicznego przygotowania produkcji prac rozwojowych, Kawecka-Endler A., Politechniki Poznańskiej, Poznań, 2004
- 2. Inżynieria produkcji, Karpiński T., WNT, Warszawa, 2007

Additional bibliography:

1. Inżynieria zarządzania. Strategia i projektowanie systemów produkcyjnych cz.2, Durlik I., Agencja Wydawnicza Placet, Warszawa, 2005

Result of average student's workload

| Activity | Time (working hours) |
|-------------------------------|----------------------|
| 1. Lecture | 14 |
| 2. Consultations | 30 |
| 3. Preparation for final test | 25 |
| 4. Final test | 6 |

Student's workload

| Source of workload | hours | ECTS |
|----------------------|-------|------|
| Total workload | 75 | 3 |
| Contact hours | 50 | 2 |
| Practical activities | 0 | 0 |